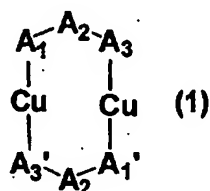


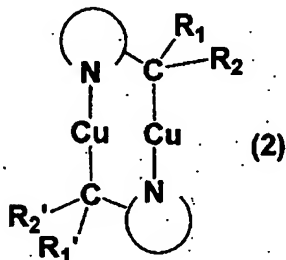
CLAIMS

1. A luminescent device which uses as a luminescent material a binuclear copper coordination compound having a partial structure represented by the following general formula (1):



- wherein Cu is a monovalent copper ion; and each of A_1 to A_3 and A_1' to A_3' is selected from the group consisting of a nitrogen atom, a carbon atom, and a phosphorus atom.

2. The luminescent device according to claim 1, wherein the copper coordination compound is represented by the following general formula (2):



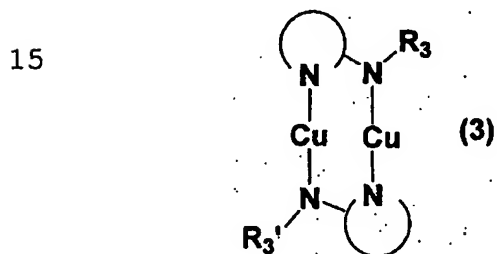
- wherein each of R_1 , R_2 , R_1' , and R_2' is a branched or straight alkyl group in which a hydrogen atom is optionally substituted by a halogen and which has 10 or less carbon atoms, an aromatic ring group optionally having a substituent, a trimethylsilyl

group, a dialkylamino group which is optionally substituted, or a diarylamino group; each of R_1 , R_2 , R_1 , and R_2 , may be the same or different; and N is an imine group on a heteroaromatic ring, and the

5 heteroaromatic ring is selected from the group consisting of a pyridine ring, a pyridazine ring, a pyrazine ring, a pyrimidine ring, a quinoline ring, an isoquinoline ring, a pyrazole ring, an azaquinoline ring, and an azaisoquinoline ring, and

10 these rings may have a substituent.

3. The luminescent device according to claim 1, wherein the copper coordination compound is represented by the following general formula (3)



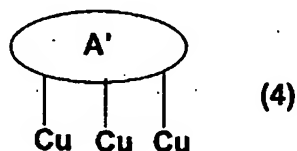
20 wherein each of R_3 and R_3' is a branched or straight alkyl group in which a hydrogen atom is optionally substituted with a halogen and which has 10 or less carbon atoms, an aromatic ring group optionally having a substituent, and a trimethylsilyl group;

25 each of R_3 and R_3' may be the same or different; and N is an imine group on a heteroaromatic ring, and the heteroaromatic ring is selected from the group

consisting of a pyridine ring, a pyridazine ring, a pyrazine ring, a pyrimidine ring, a quinoline ring, an isoquinoline ring, a pyrazole ring, an azaquinoline ring, and an azaisoquinoline ring, and these rings may have a substituent.

4. A luminescent device which uses as a luminescent material a trinuclear copper coordination compound having a partial structure represented by the following general formula (4):

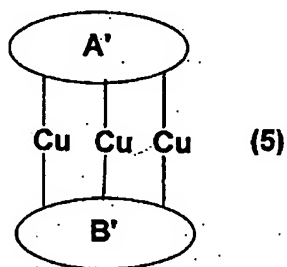
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wherein Cu is a copper ion and A' is a tridentate ligand.

5. The luminescent device according to claim 4, wherein the copper coordination compound has a partial structure represented by the following general formula (5):

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wherein B' is a tridentate ligand and may be the same as or different from A'.

6. The luminescent device according to claim 1, wherein the copper coordination compound has a partial structure represented by the following general formula (6):



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7. The luminescent device according to claim 4, wherein the copper coordination compound has a partial structure represented by the following general formula (6):

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8. The luminescent device according to claim 1, wherein the distance between copper atoms of the copper coordination compound is 3.2 Å or less.

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9. The luminescent device according to claim 4, wherein the distance between copper atoms of the copper coordination compound is 3.2 Å or less.

10. The luminescent device according to claim 1, wherein copper of the copper coordination compound is a monovalent ion.

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11. The luminescent device according to claim 4, wherein copper of the copper coordination compound is a monovalent ion.

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12. The luminescent device according to claim

1, wherein a luminescent layer contains a part of
100% of the copper coordination compound.

13. The luminescent device according to claim
4, wherein a luminescent layer contains a part of
5 100% of the copper coordination compound.